

IN THE CLAIMS

The following is a complete listing of pending claims with status identifiers in parenthesis.

LISTING OF CLAIMS

1. (Previously Presented) A method for use in a node of a network during a connection setup between a source node and a destination node, the method comprising the steps of:

initiating a cross-connect with an adjacent node;

sending a connection setup message to a next node before the cross-connect is completed; and

completing the cross-connect with the adjacent node without waiting for completion of any downstream cross-connects.

2. (Cancelled)

3. (Original) The method according to claim 1, wherein the network is an optical transport network.

4. (Original) The method according to claim 3, wherein the cross-connect is selected from a group consisting of an electrical-based cross-connect and a transparent wavelength-based optical cross-connect.

5. (Original) The method according to claim 1, wherein the connection setup is selected from the group consisting of a wavelength-based

connection setup, a SONET-based connection setup, a SDH-based connection setup, and a PDH-based connection setup.

6. (Previously Presented) A method for use in a node of a network during a connection setup between a source node and a destination node, the connection setup comprising a forward pass of signaling messages from the source node to the destination node and a reverse pass of signaling messages from the destination node to the source node, the method comprising the steps of:

initiating a cross-connect with an adjacent node on the forward pass of the connection setup;

sending a connection setup message to a next node before the cross-connect is completed; and

checking if the cross-connect was successful on the reverse pass of the connection setup.

7. (Original) The method according to claim 6, wherein the forward pass and reverse pass of signaling messages occurs out-of-band.

8. (Original) The method according to claim 6, wherein the forward pass and reverse pass of signaling messages occurs in-band.

9. (Previously Presented) A method for use in a node of a network during a connection setup between a source node and a destination node, the method comprising the steps of:

sending a connection setup message to a next node before a cross-connect is completed; and

performing the cross-connect with a downstream node prior to receipt of a signaling message related to a status of at least one cross-connect operation performed at another downstream node.

10. (Previously Presented) A method for use in a node of a network during a connection setup between a source node and a destination node, the method comprising the steps of:

sending a connection setup message to a next node from an upstream node before a cross-connect at the upstream node is completed; and

responsive to the received connection setup message, executing a cross-connect with a downstream node

whereby a cross-connect at the downstream node is initiated.

11. (Previously Presented) Apparatus comprising:

a communications interface for providing signaling to a downstream node and for receiving signaling from an upstream node; and

a processor, responsive to receipt of a connection setup message, sent from the upstream node before a cross-connect at the upstream node is completed, for performing a cross-connect with the downstream node prior to

receipt of a signaling message from the downstream node related to a status of at least other cross-connect operation related to the connection setup.

12. (Original) The apparatus according to claim 11, wherein the upstream node and the downstream node are in an optical transport network.

13. (Original) The apparatus according to claim 12, wherein the cross-connect is selected from the group consisting of an electrical-based cross-connect and a transparent wavelength-based optical cross-connect.

14. (Original) The apparatus according to claim 11, wherein the connection setup is selected from the group consisting of a wavelength-based connection setup, a SONET-based connection setup, a SDH-based connection setup, and a PDH-based connection setup.

15. (Original) The apparatus according to claim 11, wherein the signaling occurs out-of-band.

16. (Original) The apparatus according to claim 11, wherein the signaling occurs in-band.

17. (Previously Presented) Apparatus comprising:
a communications interface for receiving signaling, sent from an upstream node before a cross-connect at the upstream node is completed on a forward pass of a connection setup and receiving signaling from a downstream node on a reverse pass of the connection setup; and

a processor for initiating a cross-connect with the downstream node on the forward pass, and for checking if the cross-connect was successful on the reverse pass.

18. (Previously Presented) Apparatus comprising:

a communications interface for receiving a connection setup message, sent from an upstream node before a cross-connect at the upstream node is completed; and

a processor for executing a cross-connect with a downstream node and for sending, through the communications interface, a connection setup message to the downstream node, whereby a cross-connect at the downstream node is initiated.

19. (Previously Presented) The method as in claim 1 wherein the setup message is sent from an intermediate node.

20. (Previously Presented) The method as in claim 6 wherein the setup message is sent from an intermediate node.

21. (Previously Presented) The method as in claim 9 wherein the setup message is sent from an intermediate node.